

Claims

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1. Branched polymer, characterised in that it is derived from the following mixture of monomers:
- 5 (A) 50 to 93 wt.% of at least one ethylenically unsaturated monomer,
- (B) 2 to 25 wt.% of at least one ethylenically unsaturated macromonomer with a molecular weight of 1,000 to 20,000 and
- 10 (C) 5 to 25 wt.% of at least one polymerisable imidazole derivative,
- wherein components (A), (B) and (C) together make up 100 wt.%, the polymer possesses a molecular weight of 15,000 to 100,000 and is optionally present in the form of a salt.
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2. Branched polymer according to claim 1, wherein component (B) is present in a quantity of 5 to 15 wt.% and component (C) in a quantity of 10 to 20 wt.%.
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3. Branched polymer according to one or more of claims 1 and 2, wherein the molecular weight of the polymer is 25,000 to 75,000, preferably 30,000 to 50,000.
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4. Branched polymer according to one or more of claims 1 to 3, wherein component (A) is optionally a hydroxyalkyl or an alkyl polyalkylene glycol acrylate or methacrylate, a styrene or derivative thereof or a vinyl ether and component (B) is a poly(meth)acrylate with terminal (meth)acrylic function or a monovinyl-terminated polydimethylsiloxane and component (C) is N-vinylimidazole.
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5. Branched polymer according to one or more of claims 1 to 4, wherein this is present as a salt of a fatty acid, a hydroxycarboxylic acid, a sulfonic acid, a sulfate, an acidic phosphate or an inorganic acid.

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6. Process for the production of a branched polymer, characterised in that

(A) 50 to 93 wt.% of at least one ethylenically unsaturated monomer,

10 (B) 2 to 25 wt.% of at least one ethylenically unsaturated macromonomer with a molecular weight of 1,000 to 20,000 and

(C) 5 to 25 wt.% of at least one polymerisable imidazole derivative

15 are polymerised by free-radical polymerisation in the presence of an organic solvent and at least one radical initiator, at a temperature of 50 to 180°C, and the polymer thus obtained is optionally converted to its salt.

20 7. Process according to claim 6, characterised in that the organic solvent is an ester and the radical initiator is a peroxide or an azo compound.

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25 8. Process according to one or more of claims 6 and 7, characterised in that the reaction temperature is 90 to 150°C.

30 9. Use of the polymers from one or more of claims 1 to 5 as dispersing agents for the production of paints and/or pastes and/or moulding compositions containing pigments and/or fillers, optionally in combination with binders.

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Year	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100
1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	